



# California Regional Water Quality Control Board

## San Diego Region



Alan C. Lloyd, Ph.D.  
Secretary for  
Environmental  
Protection

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9174 Sky Park Court, Suite 100, San Diego, California 92123-4340  
(858) 467-2952 • Fax (858) 571-6972  
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

October 31, 2005

In Response Refer to:  
**TSMC:50-2652.05:jebsen**

Office of the Assistant Chief of Staff  
Environmental Security  
P.O. Box 555008  
U.S. Marine Corps Base  
Camp Pendleton, CA 92055-5008  
Attn: Ms. Tracy Sahagun, LUFT RPM

Dear Ms. Sahagun:

**RE: NO FURTHER ACTION FOR MCAS FORMER FUEL FARM, AREA 23, U.S.  
MARINE CORPS BASE, CAMP PENDLETON, SAN DIEGO COUNTY, 9UT2652**

This letter confirms the completion of a site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

**California Environmental Protection Agency**



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U.S Marine Corps  
Camp Pendleton  
9UT2652

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October 31, 2005

Please contact Ms. Jody Ebsen of my staff at 858-636-3146 or by email at [jebsen@waterboards.ca.gov](mailto:jebsen@waterboards.ca.gov) if you have any questions regarding this matter.

Sincerely,

  
JOHN H. ROBERTUS  
Executive Officer

JHR:jro:jme

Enclosure: Order No. R9-2005-0240: Rescission of Cleanup and Abatement Order No. 95-09

***California Environmental Protection Agency***

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

ORDER NO. R9-2005-0240

AN ORDER RESCINDING  
CLEANUP AND ABATEMENT ORDER NO. 95-09

ISSUED TO  
THE UNITED STATES (U.S.) MARINE CORPS  
FOR THE GROUNDWATER POLLUTION  
AT THE MCAS FORMER FUEL FARM  
23 AREA, U.S. MARINE CORPS BASE  
CAMP PENDLETON, CALIFORNIA  
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego (hereinafter Regional Board) finds that:


1. On March 16, 1995, the Regional Board issued Cleanup and Abatement Order (CAO) No. 95-09 to the U.S. Marine Corps Base at Camp Pendleton (hereinafter Discharger) for discharges of petroleum fuel wastes into ground water at the Former Fuel Farm at the Marine Corps Air Station (MCAS).
2. CAO No. 95-09 established requirements for cleanup of pollution caused by the unauthorized release(s) (discharges) of petroleum fuel wastes into the ground water.
3. The ground water remediation and reporting directives of CAO No. 95-09, were amended Addendum No. 1 to CAO No. 95-09 on March 30, 1999.
4. The Discharger permanently ceased aircraft fueling operations at the former MCAS fuel farm (the site) in July 2000. Demolition of the site, which included dismantling and removal of all equipment, was completed by June 2001.
5. A capture zone analysis for the three active potable water supply wells located near the site showed that the ground water, located within the area of the former Fuel Farm, was not influenced by active production of the wells.
6. Sentry ground water monitoring wells were installed at locations between the site and the nearby active potable water supply wells to establish an early warning system to detect migration of ground water pollutants from the site towards the water supply wells. Monitoring data from the sentry wells do not indicate detections of total petroleum hydrocarbons that would show migration of ground water pollutants toward the nearby potable water supply wells.

7. Approximately 6 gallons of Light Non-Aqueous Phase Liquids (LNAPL) were recovered from the ground water monitoring wells. Since 2003, LNAPL has not been observed in ground water monitoring wells.
8. An in-situ air sparging (IAS) system was installed in the area containing pollutant concentrations in excess of water quality objectives (i.e., maximum contaminant levels or MCLs) in the ground water. The IAS system was operated from October 1999 through March 2003, when it was estimated that 99-100% removal of benzene, toluene, ethylbenzene, and total xylenes had been achieved. Subsequent ground water monitoring over 6 quarters indicates that pollutant concentrations have not rebounded since termination of the IAS system at the site.
9. All verification soil samples collected within the IAS area of influence indicate non-detectable levels of benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), total petroleum hydrocarbons (TPH)-quantified as JP5, and total petroleum hydrocarbons (TPH)-quantified as diesel fuel.
10. An estimated 8,500 cubic yards of soil were impacted by the unauthorized release of petroleum fuel wastes. Fuel contaminated soil wastes were excavated from the vadose zone. The volume of residual soil wastes remaining in-situ is estimated to be 1,790 cubic yards located within small-localized areas of the site. Further excavation of the residual contaminated soil waste is not possible due to subsurface obstructions and presence of ground water.
11. Over the last eight quarters most of the ground water monitoring for benzene, toluene, ethylbenzene, total xylenes, and methyl tertiary butyl ether were below detectable levels. Over this same time period the few samples with detectable levels were all below the respective primary maximum contaminant levels.
12. The Discharger has complied with the Directives of CAO 95-09 and addenda thereto.
13. The Discharger's compliance with the ground-water remediation directives in CAO No. 95-09 is documented in *Closure Report for the Former Fuel Farm, Marine Corps Air Station, MCB Camp Pendleton*, dated December 17, 2004.
14. The Discharger has completed the corrective actions required by CAO No. 95-09 for the property at the Former Fuel Farm, Area 23 at Camp Pendleton. No further action is required at this time.
15. A public notice of this rescission order was included in the Notifications section of the August 10, 2005 Regional Board meeting agenda to allow the public an opportunity to comment on this action.

16. The current property owner(s), U.S. Marine Corps, has been notified of this action in accordance with section 25299.37.2 of the Health and Safety Code and section 13307.1 of the Water Code.
17. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resource Code, section 21000 et seq.) in accordance with section 15321, Chapter 3, Title 14, California Code of Regulations.

**IT IS HEREBY ORDERED** that under the authority of Water Code section 13304,

1. Cleanup and Abatement Order No. 95-09, issued to U.S. Marine Corps Base, Camp Pendleton, San Diego County, is hereby rescinded.

  
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JOHN H. ROBERTUS  
Executive Officer

Date: October 31, 2005